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Recommended Guidelines for Facilities, Equipment, Grounds, and Maintenance.
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Recommended minimum physical facility standards are listed in this set of guidelines drawn up in outline form for Iowa public schools. Included are standards for school sites, safety, playgrounds, physical condition of exterior as well as interior of buildings, various classroom types, guidance facilities, auditoriums, gymnasiums, instructional materials centers, cafeterias, heating and ventilating, electrical installations, sanitary facilities, heights of chalkboards and tackboards, and classroom furniture. The standards listed are indexed numerically. (NI)

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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RECOMMENDED GUIDELINES FOR FACILITIES, EQUIPMENT, GROUNDS AND MAINTENANCE

1.0 SITES. A school site for a modern educational program should provide for functional requirements such as space for outdoor education, physical education, parking, loading, and drives and walks.

1.1 Size. The site should be large enough to accommodate the number of pupils who attend the school.

1.1(1) The minimum site for an elementary school should be ten (10) acres plus an additional acre for each 100 pupils with due consideration given to the predicted ultimate maximum enrollment.

1.1(2) Junior high schools should be provided with a minimum site of fifteen (15) acres plus an additional acre for each 100 students in excess of 400 pupils with consideration given to maximum projected enrollment.

1.1(3) Senior high schools should be provided with a minimum site of thirty (30) acres plus an additional acre for each 100 pupils in excess of 500 with consideration given to maximum projected enrollment.

1.2 Location. The school site should be centrally located with easy accessibility for all students.

1.3 Drainage. The site should be properly drained to provide grounds free from surface water and to drain rain water away from the school building.

1.4 Walks. The walk should be in proper repair and be properly located.

2.0 SAFETY. The protection and safety of students is of prime importance in selecting a school site. An aesthetically pleasing site contributes to the well-being of the youngsters and the school staff.

2.1 Location. The site should be located free from traffic hazard, obnoxious odors, dirt, and noise.

2.2 Landscape. The site should be landscaped and well-maintained.

3.0 PLAYGROUND. Physical education facilities differ with the age group of the students and the educational program. At the elementary level the playground should provide sufficient space for recreation and serve as an auxiliary teaching station.

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3.1 Area. Well-equipped play areas should be provided with consideration being given to grade levels being served.

3.2 Surface. The play surface should be free from hazards.

3.3 Equipment. The play equipment should be safe and in good repair.

3.4 Access. The playgrounds and outdoor recreational areas should be easily accessible to pupils who use them.

4.0 PHYSICAL CONDITION. In order that a school plant may properly serve the school program, it should be maintained in a safe and usable condition.

4.1 Exterior. The exterior of the building should be free from any structural cracks, water damages or defective mortar. In the event of a major structural fault such as the movement of an exterior wall, the school district directors should employ a structural engineer to ascertain the status of said building.

4.2 Roof. The area of the flashings, gutters and down sputs should be in good condition.

4.3 Doors and Windows. Doors, door frames, windows, and window frames should be maintained in good condition.

4.4 Fire Regulations. In planning a new school structures the Fire Marshal's Regulations for schools should be followed.

4.5 Entries. An entry should be provided for the physically handicapped.

5.0 INTERIOR. The interior of a school plant should provide a safe and healthful environment.

5.1 Stairways. The stairways should have a minimum width of 44" and be provided with a continuous handrail at the correct height.

5.1(1) Treads. Stair treads should be of a non-slip material to prevent accidents.

6.0 ADMINISTRATION. The administrative unit should be convenient to general use facilities.

6.1 Offices. The administrative head of the school should have a private office, and a general office should be available.

6.2 Waiting Room. The administration unit should have a public waiting room readily accessible to the office.

6.3 Vault. A fire resistant vault or fire safes should be provided for storing permanent records.

6.4 Workroom. A faculty workroom should be provided.

7.0 REGULAR CLASSROOM. A regular classroom is a space provided for a general education activity which ordinarily does not require special equipment.

7.1 Elementary. An elementary classroom should be planned to serve a wide variety of activities.

7.1(1) Location. Classrooms for young children (N.S., K-3) should be located on the ground floor.

7.1(2) Size. Elementary classrooms should contain a minimum of 900 square feet with a minimum width of twenty-eight (28) feet.

7.1(3) Facilities. Each classroom should have: (1) at least two (2) electrical duplex outlets; (2) at least sixteen (16) lineal feet each of chalkboard and tackboard space; (3) movable furniture; (4) shelving for reference materials; and (5) light control to facilitate the use of visual aids.

7.1(4) Equipment and Storage. There should be provided in each classroom: (1) a work counter and sink; (2) book shelving for a room library; (3) some type (other than tackboard) of display area; (4) a teacher's closet; (5) movable furniture; (6) adjustable shades for proper light control; (7) a project table with chairs; and (8) a filing cabinet, and a teacher's desk and chair.

7.2 Secondary. A regular or interchangeable classroom is one that may be used every period of the day for various subject fields.

7.2(1) Size. A high school classroom should contain a minimum of 750 square feet.

7.2(2) Facilities. Each classroom shall have: (1) at least one (1) electrical outlet on each wall; (2) at least sixteen (16) lineal feet each of chalkboard and tackboard space; (3) movable furniture; (4) shelving for reference materials; and (5) light control to facilitate the use of visual aids.

8.0 NURSERIES. The nursery school classroom should be designed to encourage young children to naturally express themselves by exploring and integrating knowledge and skills.

8.1 Size. A nursery school classroom should provide for a minimum of 40 square feet per student exclusive of storage and related facilities.

8.2 Location. Nursery school rooms should be located on the first floor and have a separate entrance. A separate play area should be provided.

8.3 Wrap Storage. Wrap storage should be provided in the classrooms.

8.4 Toilet. Each nursery school classroom should provide toilet facilities with fixtures of a size recommended.

8.5 General. Each nursery school classroom should have: (1) at least sixteen (16) lineal feet each of chalkboard and tackboard space (See page 15 for recommended height); (2) storage space for instructional supplies; (3) storage space for play equipment; (4) at least one (1) electrical outlet on each wall; (5) movable furniture (tables and chairs are suggested; see page 15 for recommended height); (6) teacher's closet; (7) a file cabinet; and (8) teacher's desk and chair.

9.0 KINDERGARTEN. The kindergarten classroom should be designed to permit for a variety of emotional, social and intellectual experiences.

9.1 Size. A kindergarten classroom should contain at least 1200 square feet of floor space with a minimum width of 28 feet.

9.2 Location. Kindergarten rooms should be located on the first floor and have a separate entrance. A separate play area should be provided.

9.3 Wrap Storage. Wrap storage should be provided in the classroom.

9.4 Toilet. Each kindergarten classroom should provide toilet facilities with fixtures of a size recommended.

9.5 General. Each kindergarten classroom should have: (1) at least sixteen (16) lineal feet each of chalkboard and tackboard space; (2) storage space for instructional supplies; (3) storage space for play equipment; (4) at least one (1) electrical outlet; (5) movable furniture (tables and chairs are suggested); (6) teacher's closet; (7) a file cabinet; and (8) teacher's desk and chair.

10.0 HOMEMAKING. A homemaking facility should provide the type of space and equipment necessary to meet the needs of a modern curriculum.

10.1 Location. A homemaking department should be located on the first floor with an outside entrance to facilitate the delivery of materials.

10.2 Size. An all-purpose homemaking facility should contain at least 1600 square feet. However, in a multi-room department, each individual room should contain at least 900 square feet.

10.3 Storage. Each homemaking department should provide at least 200 cubic feet of cabinet-wall storage.

10.4 Kitchens. Unit kitchens should be designed to accommodate four students and should contain a sink, a range, and at least twelve (12) lineal feet of continuous counter space. One refrigerator may serve several units.

10.5 Clothing Area. A clothing area should be provided. This area should include tables for cutting purposes, sewing machines, storage space, at least one three-way mirror, boards, irons, and have available a dressing booth, or a dressing screen to permit the fitting of clothing.

11.0 INDUSTRIAL ARTS. The industrial arts area is a space which should provide opportunities for educational experiences of an industrial nature.

11.1 Flexible. The shop building arrangement should be flexible to meet challenges of changing programs.

11.2 Size. A single purpose shop should contain at least 2000 square feet, while those serving two or more areas of the curriculum should provide a minimum of 3000 square feet.

11.2(1) Shape. The shop should be rectangular with a minimum width of thirty feet and a minimum ceiling height of 12 feet.

11.3 Spaces. A shop should provide for tool storage, material storage, a finish room, and project storage.

11.4 Location. The industrial arts department should be located so as to permit easy access for the delivery of materials. The shop should be located so that the noise can be isolated from the academic learning areas.

11.5 Outlets. Electrical switches and outlets should be provided so as to facilitate the location of equipment.

12.0 SCIENCE. Science facilities should provide the space and equipment necessary to teach all of the sciences.

12.1 Location. Science rooms should be placed together in a science wing to permit sharing of common teaching materials. Biology and general science rooms are best located with a southern or eastern exposure to permit optimum lighting for plant growth.

12.2 Size. Each science room should contain a minimum of 1200 square feet of floor space exclusive of storage facilities. An additional 200 square feet of storage space should be provided for each room.

12.3 Facilities. Each science lecture room should have a demonstration table at least 36 inches high and be equipped with service utilities. Each room should be adaptable for audio-visual equipment. Safety features such as master shutoff controls and fuses or circuit breakers should be provided. Chemical storage rooms should be ventilated. Each room should be equipped with first aid kits. A preparation room should be provided when possible.

13.0 ART. The art facilities should be a working laboratory.

13.1 Location. Art facilities should be located on the main floor near the homemaking units or the general shop. North lighting is desirable.

13.2 Size. Art facilities should contain a minimum of 1200 square feet of floor space exclusive of storage area.

13.3 Storage. The storage area for art should include shelves, drawers, cupboards, exhibit counters, work counters, filing cabinets, picture files, folio trays, cubicles for unfinished projects, and book shelves.

14.0 MUSIC. Music facilities should provide space for the teaching of both vocal and instrumental music.

14.1 Location. Music rooms should be located near or adjoining the auditorium and/or stage. There should be direct outside access to the music department and all areas devoted to music should be in close proximity and easily accessible to each other.

14.2 Size. Vocal music rooms should provide 16 square feet per student and instrumental music should provide 20 square feet per student. These space requirements are exclusive of storage and other facilities.

14.3 Acoustics. Special sound control is essential for all music rooms. Floors as well as walls and ceilings should be sound absorbent.

14.4 Storage. Storage should be provided for instruments, uniforms, and music. These storage areas should be located so as to minimize the movement of instruments.

15.0 BUSINESS EDUCATION. Business education facilities should provide the space and equipment necessary to meet the needs for vocational and personal training.

15.1 Size. All rooms in the business education suite should contain a minimum of 1000 square feet.

15.2 Facilities. All rooms should have convenient outlets for all electrical machines. Each room should be adaptable for audio-visual equipment.

16.0 GUIDANCE. Guidance facilities should provide space necessary to meet the needs of the school and community.

16.1 Counselor's Office. Each counselor's office should have a floor area of at least 100 square feet. The office should be designed for uninterrupted privacy. If practical, it should be located on outside walls with windows.

16.2 Outer Office. It should approximate the total area of the counselor's offices. It should be located and equipped to function as a waiting room and a reception-information center. This area should be open to a public corridor and be easily accessible to students.

16.3 Location. The outer office should not be a part of the main administration office waiting room.

16.4 Storage. Space should be provided for storage of all guidance testing materials, pupil records, and office supplies.

17.0 HEALTH. Health facilities should provide space necessary to meet the needs of the school.

17.1 Facilities. A minimum health facility should include: a small waiting room, which will seat comfortably up to four persons, and an examining room sufficient in length to allow for the use of an eye chart.

17.2 Size. The waiting room should contain a minimum of 80 square feet and the examination room a minimum of 100 square feet.

17.3 Toilet. Each health facility should have available a toilet and lavatory.

17.4 Beds. Each health facility should have available at least two beds or cots to accommodate students.

17.5 Storage. A closet should be provided for storage of medical supplies.

18.0 SPECIAL EDUCATION. Special education areas should be planned to provide educational opportunities for the handicapped.

18.1 Size. Special education rooms for the mentally retarded should be one and one-half times larger than a regular classroom. Other special education rooms should be the same size as regular classrooms.

18.2 Facilities. Special education rooms should be in regular rather than special schools and should be self-contained.

19.0 PHYSICAL EDUCATION. Physical education is an integral part of a comprehensive education program.

19.1 Multi-purpose Rooms.

19.1(1) Size. Multi-purpose rooms used for physical education should have a minimum floor size of 40 x 60 feet. The minimum ceiling height should be sixteen (16) feet.

19.1(2) Lighting. Lighting should be equivalent to thirty (30) foot-candles evenly distributed.

19.1(3) Location. The multi-purpose facility should be located at the ground floor level and should be an integral part of the school plant readily accessable to pupils and public.

19.1(4) Safety. The activity area should be free of all obstruction such as pilasters, ventilating ducts, pipes and radiators.

19.1(5) Dressing Rooms. Dressing and shower facilities should be provided for both boys and girls.

19.1(6) Storage. Equipment and apparatus rooms should be adjacent to the multi-purpose room and should be a minimum of 150 square feet.

19.2 Gymnasium. The gymnasium should correspond to the requirement for both male and female physical education class needs as well as for interscholastic games.

19.2(1) Size. The minimum size of the playing floor should be 50 x 84 feet, which is the standard size basketball court. The minimum ceiling height shall be twenty (20) feet.

19.2(2) Lighting. Lighting should be equivalent to thirty (30) foot-candles evenly distributed.

19.2(3) Location. The gymnasium should be located at the ground floor level, and should be an integral part of the school plant readily accessible to pupils and public.

19.2(4) Facilities. This area should contain at least the following: (1) separate locker and shower rooms for both boys and girls; (2) locker facilities; (3) safe and sanitary shower rooms (12-15 square feet per student exclusive of related areas should be provided based on the size of the largest physical education class); (4) towel and equipment storage space; (5) equipment drying areas; (6) in-season and off-season storage for equipment; (7) instructor's office, locker and shower; (8) dressing and shower facilities for visiting teams; (9) dressing and shower facilities for game officials; (10) toilet facilities; and (11) a first-aid and/or treatment room. (See item 23.2 for special ventilation requirements)

20.0 AUDITORIUM. The auditorium is an essential part of the school building, due to community needs and the broadening of the educational program.

20.1 Size. The size of the auditorium should depend upon school policies, size and program, and the availability of other facilities in the community.

20.2 Location. The auditorium should be located on the ground floor and partially isolated from the rest of the building. It shall be accessible to school corridors and related school units such as music, speech, shops, and art.

20.3 Design. The auditorium should be designed with a suitable sloping floor.

20.4 Seating. The seats should be arranged for safety, comfort, sight lines, and acoustics. The seats should be securely fixed to the floor. A seat in one row should not be directly in front of a seat in the next row. A minimum distance of 32 inches from back to back of seats is needed for comfort and safety.

20.5 Ventilation. The auditorium should be well ventilated and there should be no discernable noise from the ventilating equipment. The ventilation, heating and the acoustics should meet the needs when the auditorium is in use.

20.6 Stage. The stage should be accessible from the corridor or an adjacent room. The stage should have a minimum depth of 25 feet. Twenty-five feet should be the minimum width of the proscenium arch. The height of the proscenium arch should provide suitable lines from the area of the auditorium.

20.7 Facilities. The stage should be equipped with flameproof curtains, drapes, and flats. Lighting should include rear and ceiling spot-lights with controls, provisions for overhead colored lights and for the dimming of lights. Provisions should be made for signaling, connections for sound movies and electric outlets.

20.8 Auxiliary Space. Auxiliary spaces should be provided as follows: convenient dressing rooms, a lobby, a ticket booth, checkrooms, a public telephone and public toilets.

21.0 INSTRUCTIONAL MATERIALS CENTER. The instructional materials center will permit the full and effective storage, dissemination and use of all media of instruction.

21.1 Elementary School. The need for a wide variety of books and other materials on the many reading and ability levels of the pupils, makes the central library an essential part of the instructional program.

21.1(1) Location. The central library should be located centrally, easily accessible to all pupils and teachers and away from noisy areas of the building or playgrounds.

21.1(2) Size. The central library for a seven (7) to thirteen (13) classroom elementary school should seat at least one (1) section with a minimum area of 1000 square feet.

21.1(3) Equipment. The central library should contain shelving, tables and chairs, circulation desk, card catalog, vertical files, bulletin boards, and a display area.

21.1(4) Audio-Visual. The audio-visual center may be a one-room unit providing areas for materials and equipment storage, inspection, repair, and previewing.

21.1(5) Physical Environment. The atmosphere should be quiet, restful and pleasant. Careful acoustical design is required.

21.2 Junior-Senior High School. The instructional materials center is essential to make full and effective use of all known media of instruction and new media as developed. A functional instructional materials center should have the following areas: (1) a reading room; (2) office space; (3) storage for books; (4) storage for all instructional materials and equipment; and (5) a workroom.

21.2(1) Reading Room. The reading room should seat a minimum of ten (10) percent of the school enrollment (maximum seating 100) with a minimum area of 1500 square feet. The room should be equipped with tables 3 X 5 feet or 4 feet in diameter with a minimum height of 29 inches, study carrels, circulation table, a card catalog file, bulletin boards, racks for magazines and newspapers, display counters, and a filing cabinet. The circulation desk should be placed to permit ready access for those using it.

21.2(2) Office. The office should be equipped with standard office furniture and have a minimum area of 120 square feet. If the office space also serves as a workroom it should be proportionately larger and contain a sink with hot and cold water, work counter, typewriter, table and chairs, shelving, electrical outlets, and storage cabinets.

21.2(3) Storage for Books. The lower shelf should not be closer than four inches from the floor and the top shelf should not be more than seven feet from the floor. Shelf length in any one section should not be more than three feet. The stack area should be located near or be a part of the reading room. The stack area should provide a minimum of five (5) feet between stack sections.

21.2(4) Storage for Instructional Materials and Equipment. A minimum of 400 square feet of storage space should be provided for all instructional materials and equipment.

21.2(5) Workroom. This room should serve as a working, reproducing, repairing and previewing area. The workroom should have a minimum area of 140 square feet. The room should contain a sink with hot and cold water, work counter, table and chairs, shelving, electrical outlets, and storage cabinets.

21.2(6) Location. Because of the instructional materials center's multiplicity of purpose it should be located centrally for the efficient distribution of equipment and materials and for convenient use by teachers and students.

21.2(7) Physical Environment. Both natural and artificial illumination are a must. A minimum of 50 foot-candles of light should be provided. The general atmosphere should be quiet, restful and pleasant. Careful acoustical design is required.

22.0 CAFETERIA. The school cafeteria is essentially a factory for preparing and serving meals according to a fixed time schedule.

22.1 Location. The cafeteria should be located at one end of the building so the cooking odors will not permeate through the entire building. The dining area should have direct access from the corridors and should have convenient access from the outside. Lunchroom traffic should be planned to avoid interference from corridor to service area, to tables, to soiled dish return and to corridor.

22.2 Size. The area of the kitchen should be one and one-half (1½) square feet per meal served with a minimum of 300 square feet. The dining area should provide 10 square feet per pupil to be seated with a minimum area of 1250 square feet.

22.3 Utilities. All utilities--gas, electricity, water, and sewer--should be provided.

22.4 Physical Environment. The following should be provided in all cafeterias: (1) sanitizing devices for washing and sterilizing all dinnerware and utensils; (2) sanitary storage facilities; (3) 20 foot-candles of light; (4) cheerful colors; (5) good ventilation; (6) sanitary conditions; (7) minimum amount of noise; and (8) screens for windows and doors.

22.5 Storage. Storerooms should be rodent and vermin proof, well-lighted, ventilated by louvers or mechanical means, and protected from theft by locked doors and windows. Adjustable slat or mesh shelving, portable platforms, metal bins and storage containers should be provided from 12 inches above floor level. Convenient enclosed shelving and hanging space should be provided for dishes and cooking utensils. Facilities for the storage of milk and frozen food should be provided.

22.6 Washroom. Toilet, washroom, and locker space should be provided near the kitchen for the employees.

23.0 HEATING AND VENTILATING. Heating plants and ventilating systems should be of sufficient capacity to meet the requirements within the building during the period of occupancy, under extremes in local weather conditions, without sustained operation beyond the rated capacity of the system.

23.1 Operative Temperature. Heating systems should provide the following temperatures: (a) classrooms, auditoriums, offices, cafeterias, 70 degrees F. measured 30 inches above the floor; (b) corridors, stairways, shops, laboratories, and kitchens, 68 degrees F. measured 60 inches above the floor; (c) activity rooms such as gymnasiums, 65 degrees F. measured 60 inches above the floor; and (d) 65 degrees F. for toilet rooms, 78 degrees F. for locker and shower rooms, and 83 degrees F. for swimming pools measured at 60 inches above the floor. The maximum temperature gradient from floor to 60 inches above the floor should not exceed 3 degrees.

23.2 Air Supply. All schools should be equipped with a mechanical ventilating system and these systems should provide for the introduction of fresh air as follows: (a) in classrooms and libraries a minimum of 10 CFM per person; and (b) in toilet and locker rooms, science rooms, food laboratories and kitchens a minimum of six air cleaneages per hour. Toilet and locker room ventilating systems should be entirely independent of those serving the rest of the building.

23.3 Air Movement. Air movement in occupied areas generally should not exceed 26 lineal feet per minute.

23.4 Special Ventilation. Various areas in the school create special ventilating problems. Auditoriums and other spaces where large numbers of people assemble should have ample ventilation. Mechanical supply ventilation, with six to eight air changes per hour is essential.

23.4(1) Toilet rooms, food laboratories, kitchens, and other spaces generating odors should have positive, separate exhaust ventilating facilities.

23.4(2) Fume hoods in laboratories should have non-corrosive ducts and have a positive exhaust control switch.

23.4(3) Drying rooms should be provided with separate mechanical ventilators.

24.0 ELECTRICAL. Electrical installations are becoming more complex and increasingly important in the teaching and administrative functions of a school system.

24.1 Service panels. Main service panels should be located so as to prevent access by unauthorized persons. All branch panels located in corridor or other places where students have access should be a flush type and should be provided with a lock.

24.2 Switches. Switches should be provided at the entrance to all spaces in the building. Such switches should be placed on the knob side of the door entrance.

24.3 Outlets. Every instructional classroom should be provided with a minimum of two duplex receptacles one located on the front and one at the back of the room. Where there is a work counter on the side of the room, a third duplex receptacle should be mounted either in the counter or on the wall above the counter.

24.4 Special Wiring. All auditoriums, gymnasiums, multi-purpose rooms or other areas used for general assembly purposes should be wired for the use of audio-visual equipment. In areas which contain a stage build-in speaker, cables should be provied.

24.5 Special Areas. Science laboratories, distributive education areas, homemaking departments, business education departments, shop and other instructional areas which require a considerable amount of electrical equipment should be provided additional outlets.

24.6 Television. Raceways should be provided in all instructional areas for television antenna and/or closed circuit systems.

24.7 Lighting. Visual comfort and efficiency is achieved where the total environment has been conditioned and balanced.

24.7(1) The lighting should produce a uniform distribution of shadow-free and glare-free illumination.

24.7(2) Lighting fixtures should not produce a surface brightness on the fixture or on the ceiling that exceeds ten times the task brightness.

24.7(3) All areas should have lighting fixtures sufficient to provide the following amount of foot-candle lighting evenly distributed at the working surface level.

Regular Classrooms.	50 foot-candles
Libraries and Offices	50 foot-candles
Special Rooms including: Science, Homemaking, Business Education, Art Rooms, Shops & Music Rooms.	75 foot-candles
Physical Education Activity Spaces.	30 foot-candles
Locker Rooms, Dining Rooms, and School Commons and Auditoriums	15 foot-candles
Drafting Laboratories	100 foot-candles
Food Services Facilities.	20 foot-candles

25.0 SANITARY FACILITIES. Well-located and properly maintained sanitary facilities are essential for the health and comfort of the school occupants.

25.1 Water Supply. A safe water supply which is capable of providing 30 gallons per day per person should be available to all schools.

25.2 Toilet Rooms. Toilet facilities should be available for both sexes on each floor of each building.

25.2(1) Floor drains and hose bibs should be provided in each gang toilet room.

25.2(2) Soap dispensers, waste containers, mirrors, book shelves, and hand drying facilities should be provided in each gang toilet.

25.2(3) Warm water should be provided in all lavatories and the temperature should be thermostatically controlled.

25.3 Water Closets and Urninals. The following ratio of sanitary fixtures should be considered minimum in all gang toilets.

Water Closets

	Girls	Boys
Grades 1-6	1 to 35	1 to 60
Grades 7-12	1 to 45	1 to 100

A minimum of two water closets should be provided in each gang toilet.

Urninals for boys' gang toilet rooms should be provided in the rates of one (1) to each 30 boys or major fraction thereof, but are not required in individual classroom toilet rooms.

In kindergarten and lower primary grades, the "baby" water closet bowl (10 inch rim height) should be provided; in the upper elementary grades a junior size bowl (13 inch rim height) should be provided; and for grades 7-12 and adults the standard size bowl (15 inch rim height) shall be provided.

25.4 Lavatories. Lavatories should be provided in the ratio of one (1) fixture to sixty (60) pupils. Sinks should be installed 25 inches above the floor for elementary grades and 30 inches above the floor for high school pupils and adults.

25.5 Drinking Fountains. Drinking fountains should be provided in the ratio of one (1) to 75 pupils with a minimum of one fountain on each floor, and two (2) in each school building.

25.5(1) A fountain should be provided in each lower elementary (N.S., K-3) classroom.

25.5(2) The following heights for nozzles should be followed when fountains are installed: kindergarten and primary grades, twenty-four (24) inches; upper elementary grades, twenty-eight (28) inches; junior high school, thirty-two (32) inches, and senior high school, thirty-six (36) inches.

25.6 Service Sink. A service sink with both hot and cold water should be provided in each custodian's closet and at least one custodian's closet should be located on each floor.

26.0 PRELIMINARY PLANS. All preliminary plans for new school plants and/or additions should be reviewed with an educational facilities consultant for suggestions and improvements.

CHALKBOARD AND TACKBOARD HEIGHTS

Heights. The height of chalkboards and tackboard from the floor to the lower edge of the molding should be approximately:

Kindergarten.	24"
Grades 1, 2, and 3.	26"
Grades 4, 5, and 6.	28"
Grades 7, 8, and 9.	30"
High School	33"

FURNITURE HEIGHTS

The proper heights for table and chairs are:

	Table	Chairs
Elementary School	25" to 28"	14" to 17"
Junior High School.	27" to 30"	16" to 18"
Senior High School.	29" to 30"	18"